

WHAT IS CLAIMED IS:

1. A method for communicating data from a wireline terminal to a mobile terminal in a telecommunications network, said method comprising the steps of:
- receiving by a server data destined for the mobile terminal;
- identifying a mobile identification number associated with the mobile terminal;
- 5 determining a route that excludes a home node associated with the identified mobile identification number when a visited node serves the identified mobile identification number; and
- sending the received data to the mobile terminal on a connection initiated by the server and established via the determined route.
2. The method of claim 1, further comprising the steps of:
- receiving by the server data from the mobile terminal on the established connection; and
- sending to the wireline terminal the data received from the mobile terminal.
3. The method of claim 1, further comprising the step of:
- determining by the server another route that includes the home node when the home node serves the identified mobile identification number.
4. The method of claim 1, further comprising the step of:
- sending the data by the wireline terminal to the server to establish communication with the mobile terminal.
5. The method of claim 1, further comprising the step of:
- sending the data by the wireline terminal to the server via a packet network to establish communication with the mobile terminal.

6. The method of claim 1, wherein the identifying step comprises the step of:
identifying the mobile identification number based on an identifier associated with
the mobile terminal.
7. The method of claim 1, wherein the identifying step comprises the step of:
identifying the mobile identification number based on an Internet Protocol (IP)
address associated with the server and the mobile terminal.
8. The method of claim 1, wherein the determining step comprises the step of:
identifying a home location register based on the identified mobile identification
number.
9. The method of claim 1, wherein the determining step comprises the step of:
requesting the route from a home location register serving the identified mobile
identification number.
10. The method of claim 1, wherein the determining step comprises the step of:
receiving from a home location register serving the identified mobile
identification number a temporary local directory number for establishing the connection to the
mobile terminal.
11. The method of claim 1, wherein the sending step comprises the step of:
establishing the connection to the mobile terminal via a modem that interfaces the
server and a wireline switch.
12. The method of claim 1, wherein the sending step comprises the step of:
establishing the connection to the mobile terminal via a modem that interfaces the

server and a wireless switch.

13. The method of claim 1, wherein the sending step comprises the step of:
initiating a call by the server to the mobile terminal based on a temporary location
directory number received from a home location register associated with the mobile terminal.

14. The method of claim 1, wherein the sending step comprises the step of:
initiating a call by the server to the mobile terminal based on a temporary location
directory number received from the visited node serving the identified mobile identification
number.

15. A method for communicating data from a wireline terminal to a mobile terminal
in a telecommunications network, said method comprising the steps of:
assembling by the wireline terminal data into one or more data packets; and
sending the data packets to a server for communicating the data packets to the
5 mobile terminal on a connection initiated by the server such that the connection is established via
a route that excludes a home node associated with the mobile terminal when the mobile terminal
resides outside of a geographical area served by the home node.

16. The method of claim 15, wherein the assembling step comprises the step of:
including in the data packets an identifier associated with the mobile terminal.

17. The method of claim 15, wherein the assembling step comprises the step of:
including in the data packets an Internet Protocol (IP) address associated with the
server and the mobile terminal.

18. The method of claim 15, further comprising the steps of:

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preassigning a plurality of Internet Protocol (IP) addresses to the server; and
configuring the server to associate one of the preassigned IP addresses with the
mobile terminal.

19. An apparatus for communicating data between a wireline terminal and a mobile terminal in a telecommunications network, said system comprising:

a memory including

5 a first table including information for identifying a mobile identification
number associated with the mobile terminal; and

code for receiving from the wireline terminal one or more data packets
destined for the mobile terminal, and for determining a route that excludes a home node
associated with the mobile identification number when a visited node serves the mobile
identification number, and for establishing via the determined route a connection to the mobile
10 terminal, and for sending the data packets on the established connection to the mobile
terminal; and

a processor for running the code.

20. The apparatus of claim 19, wherein the information in the first table includes the
mobile identification number and an identifier associated with the mobile terminal.

21. The system of claim 19, wherein the information in the first table includes the
mobile identification number and an Internet Protocol (IP) address associated with the mobile
terminal and the apparatus.

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22. The system of claim 19, wherein the memory further includes:
a second table including information for identifying a home location register
associated with the mobile identification number.

23. The system of claim 22, wherein the information in the second table includes a point code associated with the home location register.

24. The system of claim 22, wherein the information in the second table includes a range of one or more directory numbers associated with the home location register.

25. A system for communicating data between a wireline terminal and a mobile terminal in a telecommunications network, said system comprising:

a server comprising

5 a first table including information for identifying a mobile identification number associated with the mobile terminal;

a second table including information for identifying a home location register associated with the mobile identification number; and

10 code for receiving from the wireline terminal one or more data packets destined for the mobile terminal, and for determining a route that excludes a home node associated with the mobile identification number when a visited node serves the mobile identification number, and for establishing via the determined route a connection to the mobile terminal, and for sending the data packets on the established connection to the mobile terminal;

a processor for running the code; and

15 a packet network for providing communication between the wireline terminal and the server.

26. The system of claim 25, further comprising:

a plurality of modems interfacing the server and a wireline switch for establishing communication between the server and the mobile terminal.

27. The system of claim 25, further comprising:

one or more modems interfacing the server and a wireless switch for establishing

communication between the server and the mobile terminal.

28. A network, comprising:
- a home node serving a mobile terminal when the mobile terminal is in a geographical area served by the home node;
 - a visited node serving the mobile terminal when the mobile terminal is outside of the geographical area served by the home node; and
 - a server for receiving from a wireline terminal one or more data packets destined for the mobile terminal, and for determining a route that excludes the home node when the mobile terminal is served by the visited node, and for establishing via the determined route a connection to the mobile terminal, and for sending the data packets on the established connection to the mobile terminal.
29. A computer-readable medium capable of configuring a computer to perform a method for communicating data between a wireline terminal and a mobile terminal in a telecommunications network, said method comprising the steps of:
- receiving from the wireline terminal data destined for the mobile terminal;
 - identifying a mobile identification number associated with the mobile terminal;
 - determining a route that excludes a home node associated with the identified mobile identification number when a visited node serves the identified mobile identification number;
 - establishing a connection via the determined route to the mobile terminal; and
 - sending the data to the mobile terminal on the established connection.
30. A method for communicating data from a wireline terminal to a mobile terminal in a telecommunications network, said method comprising the steps, performed by a server, of:
- receiving data destined for the mobile terminal; and

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